

# **Air Quality Permitting Statement of Basis**

**November 17, 2006** 

Tier I Operating Permit No. T1-040049

Fiberglass Systems, Inc Boise, Idaho

Facility ID No. 001-00101

Prepared by:

Almer Casile Permit Writer Air Quality Division

**PUBLIC COMMENT** 

# **Table of Contents**

ACRO	NYMS, UNITS, AND CHEMICAL NOMENCLATURE	3
1.	PURPOSE	4
2.	FACILITY DESCRIPTION	4
3.	FACILITY/AREA CLASSIFICATION	4
4.	APPLICATION SCOPE	4
5.	SUMMARY OF EVENTS	4
6.	PERMIT ANALYSIS	6
7.	REGULATORY ANALYSIS	6
8.	PERMIT ANALYSIS	10
9.	INSIGNIFICANT ACTIVITIES	12
10.	ALTERNATIVE OPERATING SCENARIOS	12
11.	TRADING SCENARIOS	12
12.	COMPLIANCE SCHEDULE	12
13.	PERMIT REVIEW	12
14.	ACID RAIN PERMIT	13
15.	REGISTRATION FEES	13
16.	RECOMMENDATION	13
Δ PPFN	NDIX A - AIRS DATA ENTRY FORM	14

## Acronyms, Units, and Chemical Nomenclature

AFS AIRS Facility Subsystem

AIRS Aerometric Information Retrieval System

Bbl barrel

Btu British thermal unit

CFR Code of Federal Regulations

CO carbon monoxide

DEQ Department of Environmental Quality

EPA U.S. Environmental Protection Agency

HAPs hazardous air pollutants

hp horsepower

IDAPA a numbering designation for all administrative rules in Idaho promulgated in

accordance with the Idaho Administrative Procedures Act

km kilometer

lb/hr pound per hour

MMBtu million British thermal units

NESHAP National Emission Standards for Hazardous Air Pollutants

NO<sub>x</sub> nitrogen oxides

NSPS New Source Performance Standards

PM particulate matter

PM<sub>10</sub> particulate matter with an aerodynamic diameter less than or equal to a nominal 10

micrometers

PSD Prevention of Significant Deterioration

PTC permit to construct

SIC Standard Industrial Classification

SO<sub>2</sub> sulfur dioxide

T/yr tons per year

UTM Universal Transverse Mercator

VOC volatile organic compound

#### 1. PURPOSE

The purpose of this memorandum is to explain the legal and factual basis for this draft Tier I operating permit in accordance with IDAPA 58.01.01.362.

The Department of Environmental Quality (DEQ) has reviewed the information provided by Fiberglass Systems, Inc. regarding the operation of its facility located in Boise, Idaho. This information was submitted based on the requirements to submit a Tier I operating permit application in accordance with IDAPA 58.01.01.313.03.

#### 2. FACILITY DESCRIPTION

This facility is a fiberglass tub and shower manufacturer.

#### 3. FACILITY/AREA CLASSIFICATION

This facility is a major facility as defined by IDAPA 58.01.01.008.10, because it emits or has the potential to emit a regulated air pollutant(s) in amounts greater than or equal to major facility threshold(s) listed in Subsection 008.10.

The Standard Industrial Classification (SIC) defining the facility is 3079, and the Aerometric Information Retrieval System (AIRS) facility classification is A.

The facility is located in Ada County which is designated as attainment for  $PM_{10}$  and CO, and unclassifiable for all other criteria pollutants. There is not a Class I area(s) within 10 kilometers (km) of the facility. This facility is located in Air Quality Control Region (AQCR) 64 and Universal Transverse Mercator (UTM) Zone 11.

#### 4. APPLICATION SCOPE

This permitting action involves the renewal of the facility's existing Tier I operating permit and incorporates 40 CFR 63, Subpart WWWW.

#### 5. SUMMARY OF EVENTS

December 22, 2004

February 20, 2005

DEQ determines application complete

September 14, 2006

Public comment period begins.

October 13, 2006

Public comment period ends.

DEQ updated permit to include requirements of 40 CFR 63, Subpart WWWW.

#### 5.1 Permitting History

PTC No. 001-00101, issued October 5, 1994

PTC No. 001-00101, issued May 2, 1995

PTC No. 001-00101, issued February 14, 2000

PTC No. 001-00101, issued December 28, 2000

Tier I Operating Permit No. 001-00101, issued May 23, 2001 Administrative Amendment of Tier I Operating Permit No. 001-00101, issued June 13, 2001 Tier I Operating Permit application received December 22, 2004

#### 6. PERMIT ANALYSIS

### 6.1 Basis of Analysis

The following documents were relied upon in preparing this memorandum and the Tier I operating permit:

- PTC No. 001-00101, issued October 5, 1994
- PTC No. 001-00101, issued May 2, 1995
- PTC No. 001-00101, issued February 14, 2000
- PTC No. 001-00101, issued December 28, 2000
- Tier I Operating Permit No. 001-00101, issued May 23, 2001
- Administrative Amendment of Tier I Operating Permit No. 001-00101, issued June 13, 2001
- Tier I Operating Permit application received December 22, 2004
- Guidance developed by the U.S. Environmental Protection Agency (EPA) and DEQ

## 6.2 Emissions Description and Emissions Inventory

An emission inventory was not submitted as part of this renewal.

#### 7. REGULATORY ANALYSIS

#### 7.1 IDAPA 58.01.01.369 – Tier I Operating Permit Renewal

This permitting action is an operating permit renewal because of the pending expiration of the permit. Tier I operating permit renewals are subject to the requirements of IDAPA 58.01.01.369.

#### 7.2 New Source Performance Standards (NSPS) – 40 CFR 60

No applicable NSPS provisions apply.

#### 7.3 National Emission Standards for Hazardous Air Pollutants (NESHAPS) – 40 CFR Parts 61 & 63

This subpart establishes national emissions standards for hazardous air pollutants (NESHAP) for reinforced plastic composites production. This subpart also establishes compliance options, operating requirements, and work practice requirements to demonstrate initial and continuous compliance with the hazardous air pollutants (HAP) emissions standards for open molding, polymer casting, mixing, and cleaning of equipment procedures used in reinforced plastic composites manufacture. The requirements of this subpart apply to this facility because the facility-wide HAP emissions of the facility exceed major source thresholds.

40 CFR 63.5785(a)......Am I subject to this subpart?

The requirements of this subpart apply to this facility because the facility owns or operates a reinforced plastic composites production facility that is located at a major source of HAP emissions.

40 CFR 63.5787(a) applies because the source meets the applicability criteria in 40 CFR 63.5785, and is not subject to the Boat Manufacturing NESHAP (40 CFR part 63, subpart VVVV). The requirements of 40 CFR 63.5785(b) through (d) do not apply because the facility is not subject to the Boat Manufacturing NESHAP (40 CFR part 63, subpart VVVV).

In accordance with 40 CFR 63.5790(a), the facility is subject to this subpart because it is a new or existing facility. In accordance with 40 CFR 63.5790(b), the affected sources located at the facility are open molding, polymer casting, mixing, cleaning of equipment used in reinforced plastic composites manufacture, HAP- containing materials storage, and repair operations on parts the facility manufactures.

In accordance with 40 CFR 63.5795, the facility is an existing source because it began construction before August 2, 2001.

This section is informational.

In accordance with 40 CFR 63.5797, the permittee may rely on information provided by the material manufacturer, such as manufacturer's formulation data and material safety data sheets (MSDS), using the procedures specified in 40 CFR 63.5797(a) through (c).

This section does not apply to the permittee.

In accordance with 40 CFR 63.5799, the facility is an existing facility, and must use the procedures in either paragraph (b)(1) or (2) of this section to calculate the facility's organic HAP emissions in tpy for purposes of determining which paragraphs in § 63.5805 apply to the facility. The calculation and notification requirements of 40 CFR 63.5799(c) apply because the facility is an existing facility.

In accordance with 40 CFR 63.5800, the permittee must comply with the standards in this subpart by the dates specified in Table 2 to this subpart. For an existing source, the date specified in Table 2 is April 21, 2006. The facility is considered an existing facility and is subject to the April 21, 2006 compliance date. The permittee has organic HAP emissions standards based on a 12-month rolling average, and, therefore, must begin collecting data on the compliance date in order to demonstrate compliance.

40 CFR 63.5805 ......What standards must I meet to comply with this?

40 CFR 63.5805(a), (a)(1), and (a)(2) of (a) do not apply to the facility because it does not have any centrifugal casting or continuous casting/lamination operations. 40 CFR 63.5805(b) does apply because the facility is an existing facility. In accordance with 40 CFR 63.5805(b), the organic HAP emissions limits in Table 3 to this subpart and the work practice standards in Table 4 to this subpart apply, regardless of the quantity of HAP emitted At the facility, the following operations occur which have emission limits in Tables 3:

- open molding non-CR/HS operations that use manual resin application,
- open molding tooling operations that use manual resin application
- open molding low flame spread/low-smoke product operations that use manual resin application
- open molding shrinkage controlled resins operations that use manual resin application
- open mold gel coat operations that use tooling gel coating
- open mold gel coat operations that use white/off white pigmented gel coating
- open mold gel coat operations that use all other pigmented gel coating

All work practices in Tables 4 apply except 1, 4, 5, and 9. The following operations occur at the facility which have emission limits in Tables 3:

- open molding non-CR/HS operations that use manual resin application,
- open molding tooling operations that use manual resin application
- open molding low flame spread/low-smoke product operations that use manual resin application
- open molding shrinkage controlled resins operations that use manual resin application
- open mold gel coat operations that use tooling gel coating
- open mold gel coat operations that use white/off white pigmented gel coating
- open mold gel coat operations that use all other pigmented gel coating

40 CFR 63.5805(d)(1) does not apply because the facility is not a new facility. 40 CFR 63.5805(d)(2)(i) and (ii) do not apply because the facility is not a new facility that manufactures large reinforced plastic composites parts using open molding or pultrusion operations.

40 CFR 63.5805(c) does not apply to the facility. The facility is not a new facility that has actual emissions less than 100 tpy of HAP. In addition, the facility is not subject to 40 CFR 63.5805(e) because the facility is not subject to IDAPA 58.01.01.5805(a)(2) or (c).

40 CFR 63.5805(f) and (g) apply. 40 CFR 63.5805(h) does not apply because the facility does not use an add-on control device to comply with this subpart.

The facility must use one of the methods in 40 CFR 63.5810 paragraphs (a) through (d) to meet the standards for open molding in Table 3 of this subpart.

Paragraphs (a) through (d) of this section do not apply to the facility because the facility has open molding operations, and is not subject to the standards continuous lamination/casting operations.

operations subject to the 60 weight percent organic HAP emissions reductions requirement? 40 CFR 63.5830 and paragraphs (a) through (d) of the section do not apply to the facility because the facility has open molding operations, and is not subject to the standards for pultrusion operations subject to the 60 weight percent organic HAP emissions reductions requirement. 40 CFR 63.5835 .......What are my general requirements for complying with this subpart? Paragraph (a) of this section applies to the facility and requires the facility to be in compliance at all times with the work practice standards in Table 4 and the organic HAP emissions limits in Table 3. Paragraph (b) of this section does not apply because the facility does not use add-on controls. Paragraphs (c) and (d) of 40 CFR 63.5835 generally apply to all facilities subject to 40 CFR 63, Subpart WWWW. 40 CFR 63.5840 ......By what date must I conduct a performance test or other initial compliance demonstration? The facility must comply with the data collection and compliance demonstration requirements of this paragraph by the compliance date specified by 40 CFR 63.5800. Because the facility is an open molding operation that elected to meet a organic HAP emissions limit on a 12-month rolling average, the facility must initiate collection of the required data on the compliance date, and demonstrate compliance 1 year after the compliance date. 40 CFR 63.5845 ......When must I conduct subsequent performance tests? This section does not apply to the permittee because it does not operate an add-on control device to meet a standard. and design evaluations? This section does not apply to the permittee because these requirements apply to facilities that operate an add-on control device to meet a standard. This section does not apply to the permittee because these requirements apply to facilities that operate an add-on control device to meet a standard.

40 CFR 63.5860 ......How do I demonstrate initial compliance with the standards?

Paragraph (a) of this section applies to the facility and requires the facility demonstrate initial compliance with each applicable organic HAP emissions standard in 40 CFR 63.5805 paragraphs (a) through (h) by using the procedures shown in Tables 8 and 9 of this subpart . Specifically, only item 1 of Table 8 applies, and items 2, 3, and 8 of Table 9 apply. Paragraph (b) of this section does not apply to the permittee because these requirements apply to facilities that operate an add-on control device to meet a standard.

This section does not apply to the permittee because these requirements apply to facilities that have continuous lamination/casting operations. The facility has open molding operations.

Paragraph (a) of this section does not apply to the permittee because this requirement applies to facilities that operate an add-on control device to meet a standard. Paragraphs (b), (b)(1) through (b)(3), (c) and (d) of this section apply. Paragraph (e) of this section does not apply to the permittee because this requirement applies to facilities that operate pultrusion machines.

Paragraph (a)(1) and (d) of this section do not apply to the permittee because these requirements apply to facilities that operate an add-on control device to meet a standard. Paragraphs (a)(2) through (a)(4), (b), (c) and (e) of this section apply.

40 CFR 63.5905 ......What notifications must I submit and when?

Paragraphs (a) and (b) of this section apply. Although the facility is a existing source subject to the initial notification requirements for existing sources under Table 13.

Paragraphs (a), (b), (b)(1) through (b)(5), (c), (c)(1) through (c)(5), (h), (i) and (g) of this section apply. Paragraphs (c)(6), (e), and (e)(1) through (e)(12) do not apply because the facility does not operate a continuous monitoring system. Paragraph (f) does not apply because 40 CFR 63.5805(a)(1) and (d) do not apply (i.e. the facility does not operate an add-on control device to meet a standard.

40 CFR 63.5915 ......What records must I keep?

Paragraphs (a), (a)(1) through (3), (c), and (d) of this section apply. Paragraphs (b) of this section does not apply to the permittee because this requirement applies to facilities that operate an add-on control device, which the permittee does not. Paragraphs (e)(1) through (4) of this section do not apply because the facility does not have new or existing continuous lamination/ casting operations.

Paragraphs (a) through (d) of this section apply.

40 CFR 63.5925 ......What parts of the General Provisions apply to me?

This section and Table 15 of Subpart WWWW, applies to this facility as specified.

This section does not apply to the facility

40 CFR 63.5935 ......What definitions apply to this subpart?

The definitions of this section apply to the facility.

#### 8. PERMIT ANALYSIS

This section describes only the changes made to the permit as a result of this permitting action. Existing permit conditions are identified as "Existing Permit Conditions", and revised permit conditions are identified as "Revised Permit Conditions."

#### **Emissions Unit – Manufacturing**

#### 8.1 Emission Unit Description – Manufacturing

The stacks at the facility are treated as an area source, because they all vent the plant floor. VOCs are emitted from various stages of production in different areas of the plant floor, so it is not possible to associate specific emissions with individual stacks.

#### **8.2** Permit Conditions Review

Table 1 provides a list of the revised numbering for the permit conditions of this permit.

Existing Permit Condition	Revised Permit Condition		
2.1-2.3	3.3-3.5		
2.4	3.8		
2.5-2.9	3.16-3.20		
2.10	3.23		
2.11	3.10		
2.12	3.22		
2.13	3.13		
2.14	3.9		
2.15	3.12		
2.16	3.14		
2.17	3.21		
2.18	3.11		
2.19	3.6		

Compliance with the VOC emission limit in Permit Condition 3.3 shall be demonstrated through the operating, monitoring, and record keeping requirements of Permit Conditions 3.16, 3.19- 3.21, and 3.23.

Compliance with the Styrene, Methylene Chloride, Methyl Ethyl Ketone Peroxide emission limit in Permit Condition 3.4 shall be demonstrated through the operating, monitoring, and record keeping requirements of Permit Conditions 3.16-3.18, and 3. 23.

Compliance with the visible emission limit in Permit Condition 3.5 shall be demonstrated through the operating, monitoring, and record keeping requirements of Permit Conditions 2.8, 3.8, and 3.10.

Compliance with the particulate emission limit in Permit Condition 3.6 shall be demonstrated through the requirements of Permit Conditions 3.8, 3.10, 3.15 and 3.22.

Compliance with the fugitive dust requirements in Permit Condition 3.13 shall be demonstrated through the operating requirements of Permit Conditions 3.9, 3.12, and 3.22.

Compliance with the fugitive VOC requirements in Permit Condition 3.14 shall be demonstrated through the operating and monitoring requirements of Permit Conditions 3.11 and 3.21.

New Permit Conditions 3.7, 3.15 and 3.24 contain the operating, monitoring, and record keeping requirements, respectively, established by 40 CFR 63, Subpart WWWW. These requirements shall be used to demonstrate compliance with HAP emission limits in new Permit Condition 3.7. The facility is an existing facility that does not have any centrifugal casting and continuous lamination/casting operations and is, therefore, subject to the applicable emission limits of Table 3 and the work practice standards of Table 4 of 40 CFR 63, Subpart WWWW.

#### **8.3** Nonapplicable Emissions Units

The facility did not provide a list of emissions units not subject to an applicable requirement other than generally applicable requirements (e.g. opacity).

#### 9. INSIGNIFICANT ACTIVITIES

Insignificant Activities	Insignificant Activities IDAPA 58.01.01.317.01(b)(I) Citation
Welding not using more than one (1) ton per day of welding rod	9
Storage and handling of water based lubricants for metal working where the organic content of the lubricant is less than ten percent (10%)	27
Combustion sources, less than five million (5,000,000) Btu/hr, exclusively using natural gas	5

#### 10. ALTERNATIVE OPERATING SCENARIOS

The facility did not request any alternative operating scenarios.

#### 11. TRADING SCENARIOS

The facility did not request any trading scenarios.

#### 12. COMPLIANCE SCHEDULE

#### 12.1 <u>Compliance Plan</u>

The facility has not provided a compliance plan.

#### 12.2 Compliance Certification

The facility is required to periodically certify compliance in accordance with General Provision 21. The facility shall submit an annual compliance certification for each emissions unit to DEQ and EPA in accordance with IDAPA 58.01.01.314.10. The compliance certification report shall address the compliance status of each emissions unit with the terms and conditions of this permit.

#### 13. PERMIT REVIEW

#### 13.1 Regional Office Review of Draft Permit

DEQ provided the draft permit to its Boise Regional Office on May 5, 2006.

#### 13.2 Facility Review

DEQ provided a draft permit to the facility on June 9, 2006. No comments were received.

#### 13.3 Public Comment

A public comment period and public notice on the Tier I operating permit shall be provided in accordance with IDAPA 58.01.01.364.

#### 14. ACID RAIN PERMIT

This facility is not an affected facility as defined in 40 CFR 72 through 75; therefore, acid rain permit requirements do not apply.

#### 15. REGISTRATION FEES

This facility is a major facility as defined by IDAPA 58.01.01.008.10; therefore, registration and registration fees in accordance with IDAPA 58.01.01.387 apply. The facility is in compliance with registration and registration fee requirements.

#### 16. RECOMMENDATION

Based on the Tier I operating permit application and review of state rules and federal regulation, staff recommend that DEQ issue draft Tier I Operating Permit No. T1-040049 for public comment to Fiberglass Systems for its Boise facility. This permit administratively renews the facility's existing Tier I operating permit. The project does not involve PSD permitting requirements.

ABC/bf Permit No. T1-040049

G:\Air Quality\Stationary Source\SS Ltd\T1\Fiberglass Systems\PC 2\T1-040049 PC2 SB.doc

# Appendix A

Fiberglass Systems, Inc Boise, Idaho

Tier I Operating Permit No. T1-040049

Facility ID No. 001-00101

# **AIRS Data Entry Form**

# AIRS/AFS<sup>a</sup> FACILITY-WIDE CLASSIFICATION<sup>b</sup> DATA ENTRY FORM

Facility Name: Fiberglass Systems, Inc.

Facility Location: Boise

AIRS Number: 001-00101

AIR PROGRAM POLLUTANT	SIP	PSD	NSPS (Part 60)	NESHAP (Part 61)	MACT (Part 63)	SM80	TITLE V	AREA CLASSIFICATION A-Attainment U-Unclassified N- Nonattainment
SO <sub>2</sub>	В							U
NO <sub>x</sub>	В							U
СО	В							U
PM <sub>10</sub>	В							U
PT (Particulate)	В							U
voc	А							U
THAP (Total HAPs)	Α				А			U
			APPLICABLE SUBPART					_
				wwww				

<sup>&</sup>lt;sup>a</sup> Aerometric Information Retrieval System (AIRS) Facility Subsystem (AFS)

- A = Actual or potential emissions of a pollutant are above the applicable major source threshold. For HAPs only, class "A" is applied to each pollutant which is at or above the 10 T/yr threshold, **or** each pollutant that is below the 10 T/yr threshold, but contributes to a plant total in excess of 25 T/yr of all HAPs.
- SM = Potential emissions fall below applicable major source thresholds if and only if the source complies with federally enforceable regulations or limitations.
- B = Actual and potential emissions below all applicable major source thresholds.
- C = Class is unknown.
- ND = Major source thresholds are not defined (e.g., radionuclides).

<sup>&</sup>lt;sup>b</sup> AIRS/AFS Classification Codes: